

I claim:

1. A bicycle having dual-purpose pedals, wherein a structure of a main shaft tube of said bicycle is improved, said structure comprising:
- 5 a main shaft received in said main shaft tube, two ends of said main shaft having bearing portions, an outer diameter of one of said bearing portions diminishing and being horizontally extended to a fixing gear to form a gear portion, the outer diameter of said gear portion also diminishing and being horizontally extended to form a fixing portion;
- 10 a first spring telescoped onto said main shaft, one end of said first spring being fixedly arranged on said main shaft, another end of said first spring having a circular hole pressed onto said main shaft;
- a gear bushing telescoped onto said fixing portion of said main shaft and correspondingly engaging said gear portion, two corresponding grooves being provided at an outside of said gear bushing;
- 15 a crank, wherein one end thereof is pivotally connected with a pedal of said bicycle and another thereof end has a crank hole therein, a flange being provided outside said crank hole, two corresponding projective bars being arranged in said crank hole, and said projective bars being matched in said two grooves of said gear bushing;
- 20 a second spring received in said crank hole and abutting said gear bushing;
- a washer abutting said flange of said crank hole and said second spring, a screw passing through said washer and being fixedly locked in said fixing portion of said main shaft to position said crank on said main shaft; and
- a fixing unit passing through said main shaft tube and fixed at a position on

said main shaft tube corresponding to said circular hole of said first spring.

2. The bicycle having dual-purpose pedals as claimed in claim 1, wherein said gear portion and said gear bushing both are two-toothed ratchets.

3. The bicycle having dual-purpose pedals as claimed in claim 1, wherein a
5 circular hole is disposed at one end of said first spring away from said gear portion so that a screw can pass therethrough and match a screw nut for fixing said first spring on said main shaft.

4. The bicycle having dual-purpose pedals as claimed in claim 1, wherein a C-shaped bushing is telescoped onto said circular hole of said first spring.

10 5. The bicycle having dual-purpose pedals as claimed in claim 4, wherein a thickness of said C-shaped bushing is greater than that of said first spring.

6. The bicycle having dual-purpose pedals as claimed in claim 1, wherein said fixing unit is composed of a pin and a steel rope, said pin passes through said main shaft tube and is fixed at a position corresponding to said circular hole
15 of said first spring on said main shaft tube, one end of said steel rope is fixedly disposed on said pin, and another end thereof is connected with an adjustment rod and fixedly disposed on a handlebar of said bicycle.

7. The bicycle having dual-purpose pedals as claimed in claim 6, wherein a small groove is provided in a top face of said pin, a bottom end of said small
20 groove is extended to form a cavity, a block body is fixedly disposed at a distal end of said steel rope, and said block body is inserted and retained in said cavity to connect and fix said pin and said steel rope together.

8. The bicycle having dual-purpose pedals as claimed in claim 1, wherein said two grooves of said gear bushing are bar-shaped, and are extended to the

edge of said gear bushing, said two projective bars of said crank hole are also bar-shaped and are extended to the distal end of said gear bushing, and said two bars are matched with and received in said two grooves to allow said gear bushing to slide in said crank hole.

- 5 9. The bicycle having dual-purpose pedals as claimed in claim 1, wherein said gear bushing has two corresponding through holes, a movable pin passes therethrough and is fixed in said crank hole, and said movable pin can be inserted in said through hole to enhance the stability of said gear bushing.